



Substitute specification
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SUBSTITUTE SPECIFICATION

BIOMECHANICALLY-DESIGNED PLASTIC HORSE SHOE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/398,053, filed on 22 July 2002.

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a method of protecting the equine hoof, promoting comfort and health thereof, and enhancing the biomechanical performance of the animal. More particularly, the present invention is a horseshoe composed of one or more plastic and other components which can be nailed or glued to the equine hoof.

[0002] An animal hoof and especially an equine hoof is composed of a relatively hard outer surface, a sole and other structures on the ground surface of the foot. The outer surface continues to grow during the animal's lifetime (similar to the human fingernail). In the wild, the growth rate of the hoof wall is approximately balanced by the wear processes as the animal moves. However, in a domestic horse, for example, such is not the case. Due to the use we humans make of the horse and the surfaces and conditions they are kept in, some 'artificial' treatment of the hoof is generally required. Most generally, a farrier will trim the hoof and apply a metal shoe to protect the foot. In recent years some non-metal shoes have also been introduced.

[0003] When the farrier trims the outer shape of the hoof, a large number of choices can be made concerning what the optimal shape of the hoof might be. Over the years, a great many theories, methodologies, and opinions concerning the best shape of the hoof have been and continue to be espoused. It is generally agreed that various angles, distances, thicknesses, and other measures of the hoof shape dramatically affect the motion, comfort, and, ultimately, health of the animal such as a horse. In perhaps a